

Serial No. 10/538,906

Art Unit: 3651
Examiner: William Ray Harp

IN THE CLAIMS:

1. (Previously Presented) An elongate container for the transport of bulk powders, the bottom of the container being provided with a longitudinally sloping membrane support extending along at least a portion of the length of the container, a gas-permeable membrane mounted on said support, said support being unsupported relative to the container between longitudinal and transverse ends of the support wherein the membrane is curved in a direction transverse to the length of the container, the extent of curvature changing along the length of the membrane.
2. Cancelled
3. (Previously Presented) A container according to Claim 1, wherein the curvature of the membrane increases in a direction from a lowest point to a highest point of the membrane.
4. (Previously Presented) A container according to Claim 1, wherein a plurality of membranes are arranged along the base of the container in lengthwise juxtaposition
5. (Original) A container according to Claim 4, wherein adjacent membranes slope in opposite directions along the length of the container.
6. (Previously Presented) A container according to Claim 1, wherein a container, at least when arranged for unloading of bulk powder therefrom, is provided with a discharge pipe, one end of which is located adjacent the lowest point of the or each membrane.

Serial No. 10/538,906

Art Unit: 3651
Examiner: William Ray Harp

7. (Original) A container according to Claim 6, wherein the discharge pipe is connected to means, located outside the container, for pneumatically conveying powder from the container to a position exterior thereof.
8. (Previously Presented) A container according to Claim 1, wherein the or each membrane is inclined at an angle of from 10° to 15° relative to the bottom of the container.
9. (Previously Presented) A container according to Claim 1, wherein means are provided, at least when the container is to be unloaded, to cause powder located above the membrane to be fluidised.
10. (Original) A container according to Claim 9, wherein the fluidising means includes means for delivering gas under pressure to the space below the sloping membrane.
11. Cancelled
12. (Previously Presented) A container according to Claim 1, wherein the membrane is made of woven fabric, porous metal sheet or porous plastic sheet.
13. (Previously Presented) A container according to Claim 1, wherein the container is cylindrical.
14. (Original) A container according to Claim 13, wherein the container is a pressure vessel located within a standard ISO Tank Container dimensioned frame.

Serial No. 10/538,906

Art Unit: 3651
Examiner: William Ray Harp

15. (Previously Presented) A method of conveying bulk powder to a destination therefor including the steps of:

loading the bulk powder into a container in which the bottom of the container is provided with a longitudinally sloping membrane support extending along at least a portion of the length of the container and a gas-permeable membrane mounted on said support and curved in a direction transverse to the length of the container, the extent of curvature changing along the length of the membrane;

transporting the container to a location in the vicinity of said destination;

feeding gas under pressure to a position between the membrane and the bottom of the container so as to fluidise the bulk powder within the container; and

pneumatically conveying said fluidised bulk powder from the container to said destination.

16. (Original) A method according to Claim 15, wherein, during the loading of the bulk powder into the container, air is extracted therefrom.

17. (Original) A method according to Claim 16, wherein air is extracted from below the membrane, thereby drawing entrapped air from the powder and through the membrane to increase the bulk density of the powder.

18. (Previously Presented) A method according to Claim 15 including providing said support being unsupported relative to the container between longitudinal and transverse ends of the support.

19. (Previously Presented) An elongate container for the transport of bulk powders, the bottom of the container being provided with a longitudinally sloping membrane support

Serial No. 10/538,906

Art Unit: 3651
Examiner: William Ray Harp

extending along at least a portion of the length of the container, a gas-permeable membrane mounted on said support, and wherein the membrane is curved in a direction transverse to the length of the container, the extent of curvature changing along the length of the membrane.

20. (Previously Presented) A container according to Claim 19 wherein the membrane support is in the form of a foraminous curved plate.